ANDRITZ GROUP

INNOVATIVE TECHNOLOGIES FOR THE PLANET

A GLOBAL PARTNER FOR KEY INDUSTRIES THAT SHAPE THE WORLD

MAY 2019

ENGINEERED SUCCESS
ANDRITZ is a globally leading supplier of plants, equipment, systems and services for hydropower stations, the pulp and paper industry, the metalworking and steel industries, and solid/liquid separation in the municipal and industrial sectors as well as for animal feed and biomass pelleting.

**Global presence**

Headquarters in Graz, Austria; over 280 production sites and service/sales companies worldwide.

### KEY FINANCIAL FIGURES:

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>Q1 2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order intake</td>
<td>MEUR</td>
<td>1,658.1</td>
<td>6,646.2</td>
</tr>
<tr>
<td>Order backlog (as of end of period)</td>
<td>MEUR</td>
<td>7,260.9</td>
<td>7,084.3</td>
</tr>
<tr>
<td>Sales</td>
<td>MEUR</td>
<td>1,489.2</td>
<td>6,031.5</td>
</tr>
<tr>
<td>Net income (including non-controlling interests)</td>
<td>MEUR</td>
<td>32.6</td>
<td>219.7</td>
</tr>
<tr>
<td>Employees (as of end of period; without apprentices)</td>
<td>-</td>
<td>29,398</td>
<td>29,096</td>
</tr>
</tbody>
</table>

**SALES BY REGION 2018 (%)**

- Europe & North America: 59%
- Emerging markets: 41%

6,031 MEUR
A WORLD MARKET LEADER
WITH FOUR BUSINESS AREAS

HYDRO

PRODUCT OFFERINGS
Electromechanical equipment for hydropower plants (turbines, generators); pumps; turbo generators.

% order intake* 22

PULP & PAPER

PRODUCT OFFERINGS
Equipment for production of all types of pulp, paper, tissue, and board; energy boilers.

% order intake* 39

METALS

PRODUCT OFFERINGS
Presses/press lines for metal forming (Schuler); systems for production of stainless steel, carbon steel, and non-ferrous metal strip; industrial furnace plants.

% order intake* 29

SEPARATION

PRODUCT OFFERINGS
Equipment for solid/liquid separation for municipalities and various industries; equipment for production of animal feed and biomass pellets.

% order intake* 10

* Share of total Group order intake 2018
Compound Annual Growth Rate (CAGR) of Group sales 2009-2018:
+7% p.a. (thereof approximately half from organic growth)
## STRENGTHENING OF MARKET POSITION BY ACQUISITIONS

### Acquisitions by business area since 2000

<table>
<thead>
<tr>
<th>Year</th>
<th>HYDRO</th>
<th>PULP &amp; PAPER</th>
<th>METALS</th>
<th>SEPARATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>GEHI (JV)</td>
<td>ABB Drying</td>
<td>2011 Iggesund Tools</td>
<td>2005 Lynson</td>
</tr>
<tr>
<td>2010</td>
<td>Ritz</td>
<td>Fiedler</td>
<td>2012 AES</td>
<td>2012 Soutec</td>
</tr>
<tr>
<td>2011</td>
<td>Hemicycle Controls</td>
<td>EMS (JV)</td>
<td>2013 MeWa</td>
<td>2013 Schuler (&gt; 95%)*</td>
</tr>
<tr>
<td>2018</td>
<td>HMI</td>
<td>Cybermetrics</td>
<td>2015 Euroslo</td>
<td>2013 FBB Engineering</td>
</tr>
<tr>
<td>2006</td>
<td>Küsters</td>
<td>Paperchine</td>
<td>2016 Yadon (52.9%)*</td>
<td>2012 Gouda</td>
</tr>
<tr>
<td>2006</td>
<td>Carbona</td>
<td>2018 Novimpianti</td>
<td>2016 AWEBA*</td>
<td>2013 Shende Machinery</td>
</tr>
<tr>
<td>2006</td>
<td>Pilão</td>
<td>Diatec (70%)</td>
<td>2017 Powerlase (80%)</td>
<td>2016 ANBO</td>
</tr>
<tr>
<td>2007</td>
<td>Bachofen + Meier</td>
<td>Xerium</td>
<td>2018 Farina Presse*</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Sindus</td>
<td>2018 ASKO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>Kufferath</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Rolteck</td>
<td></td>
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</table>

* part of Schuler Group
GROUP STRATEGY AND LONG-TERM GOALS

LONG-TERM PROFITABLE GROWTH
- Focus on markets with high growth rates
- Expansion of product portfolio through organic growth (R&D) and acquisitions
- Achieve annual sales growth averaging 5-8% depending on market growth and acquisitions

TECHNOLOGICAL AND COST LEADERSHIP
- Become preferred supplier by virtue of technology, quality and references
- Development of innovative and sustainable technologies through intensive R&D
- Focus on digitalization to support customers in reaching their goals with regard to productivity, operating costs, energy efficiency and environmental protection
- Offer best ROI for customers

GOAL: GLOBAL MARKET LEADER

EXTEND MARKET POSITIONS
- Serving markets with long-term and sustained growth potential
- Extending existing position in Europe and North America
- Making use of the growth and sales opportunities in the emerging markets of South America and Asia

GLOBAL AND LOCAL PRESENCE
- Continue expanding worldwide presence
- Offer best possible service close to the customer
- Further relocate manufacturing capacities to emerging markets

GOAL: GLOBAL MARKET LEADER
ANDRITZ SHARE
PERFORMANCE Q1 2019: -4.7%
Performance since IPO (June 2001): +1,354% (ATX: +145%)

Market capitalization (as of March 31, 2019): 4.0 billion EUR
With the **technology brand Metris**, ANDRITZ offers a broad portfolio of intelligent, digital solutions and products.

- Metris technologies are **fully tailored** to individual customer needs and optimize industrial procedures and processes.

The results for the customers:

- **Enhancing plant efficiency and profitability**
- **Optimizing the use of resources**
- **Constant and highest product quality**
- **Avoiding production downtime**
- **Maximum user-friendliness, e.g. easy control via smartphone/tablet PC/smartglasses**
In our chosen markets, we are global leaders with a passion for innovative engineering solutions.

As technology and quality leader, we create sustainable value for our customers and shareholders, thus ensuring the continuation of our long-term profitable growth.
ENGINEERED SUCCESS FOR FLAT PRODUCT PROCESSING
Carbon and stainless steel, aluminum and copper
FUNDAMENTALS OF OUR EXCELLENCE

Schuler AG
Thermtec
Powerlase
ASKO
Herr-Voss Stamco
MAERZ-Gautschi Industriefenanlagen GmbH
Davy-Swindell
Ruthner AG
Soutec AG
Selas France SA
FBB GmbH
Lynson
United Utilities
Sundwiger Eisenhütte Maschinenfabrik
Otto Kaiser GmbH
HiTEQ
Bricmont Inc.
Nisterhammer
FINDING SOLUTIONS TO ANY CHALLENGE!
A reliable partner for the production and processing of stainless steel, carbon steel and non-ferrous metals with strong focus on

• Health, Safety and Environment
• Research and development
• Project and site management
• Manufacturing and engineering
• Automation
• Life-cycle full service
All locations of ANDRITZ Metals are already part of matrix certification, for the integrated QHSE Management System acc. to ISO 9001:2015 and OHSAS 18001:2007 (ISO 45001 will be implemented within 2019). Several locations are additional certified according to ISO 14001:2015
• When it comes to workplace safety, our goal is simple – we do not want injuries or accidents at any time

• Safety begins with each individual employee. We never take risks that could endanger ourselves or others during our jobs

• We strive to eliminate accidents in all of our facilities by ensuring a safe and healthy work environment and by looking for ways to continuously improve

• We comply with all safety laws and believe that safety comes before anything else
ANDRITZ METALS
“SAFETY FIRST” PROGRAM
ANDRITZ "Safety First" program implemented at site:

• Strong cooperation between all contractors at site
• High management commitment
• Strict control of site works to increase installation quality, safety and health of on-site staff
• Permanent high management compliance workgroup
• Extremely good safety numbers during the projects
A PASSION FOR INNOVATION!
Focus on supporting customers to:

• Implement digital IIoT solutions, especially:
  • Optimization of Process Performance (OPP) based on big data
  • Digital Twins
  • Predictive models/controllers e.g. Advanced Furnace Model (AFC)
• Process new steel and aluminum grades for the automotive industry (e.g. 3rd gen. AHSS, TWBs, PHS)
• Achieve sustainable production and minimize the consumption of utilities
• **We operate 7 innovation centers in Europe and USA**
PROJECT MANAGEMENT
• Project set up with interdisciplinary international teams led by experienced project managers
• Coordination of design engineering and interfaces with customer and suppliers
• Effective communication with all involved parties and project stakeholders
• Professional document management
• Time scheduling and progress reporting for on-time delivery
• Efficient installation, commissioning and start-up
SITE MANAGEMENT

- Wide range of site jobs ranging from very small field service orders to large scale full installation contracts
- Most capital contracts include:
  - Only supervision service
  - Installation in customer scope
- Couple of full installation / EPC contracts
- Typical large capital project:
  - Approx. 5000 SV man-days
  - Approx. MEUR 10-20 installation costs
- 100 specialized site supervisors globally
BENEFIT FROM OUR MANUFACTURING CAPABILITIES!

- Consistent technological development
- Consistent improvement of reliability
- Quality
- Service (upgrades, rebuilds, spare & wear parts)

STRATEGY

- Production of key components
- High- and consistent quality due to ANDRITZ manufacturing standard
- Excellent in engineering, design and planning
THE RIGHT CLICK FOR YOUR PLANT!

Functional, reliable and safety Electric and Automation systems from in-house automation know-how combined with expertise in process and mechanical design.

- Complete automation solutions from one source
- State of the art and consistent
- Short start-up times
- Smooth operations of ANDRITZ plants and technologies
- Supported by simulation models, digital twins, advanced process control technologies, and special sensors.
- Comprehensive lifetime services
- Global services network
- Industrie 4.0 READY
ANDRITZ METALS AUTOMATION
SERVICE ABILITY

• Outstanding service product portfolio - from spare parts to mill-wide maintenance outsourcing agreements
• Close cooperation with the mill’s and service center operation and maintenance personnel
• Contribute to improved reliability, availability, and production while reducing overall operating costs

Service products and solutions

• Automation & control
• Engineered wear products
• Mill improvement
• Studies & field services
• Mill maintenance
• Remote Assistance
• Spare & replacement parts
• Upgrades & modernizations
• Rebuild & Retrofits
• Tooling
ANDRITZ to supply new hot-dip galvanizing line to Nucor Steel Arkansas, USA
The new line will have an annual capacity of approximately 455,000 metric tons and is designed to produce high-strength steel grades, mainly for the automotive industry. Read more

ANDRITZ to supply a 20-high cold-rolling mill to Aperam Genk
The cold-rolling mill will be designed with particular focus on production level, strip shape, and strip surface condition to manufacture products of the highest quality. In addition to engineering and building of the new cold-rolling mill (including electrical equipment and automation), the ANDRITZ scope of supply includes supervision of installation work and start-up. Read more

ANDRITZ to supply new tension-leveling line & new degreasing line to Hindalco Industries Ltd., India
International technology Group ANDRITZ has received an order from Hindalco Industries Ltd., India, to supply a new tension leveling line with an annual capacity of 100,000 tons and a new degreasing line with an annual capacity of 150,000 tons. Start-up is scheduled for spring 2021. Read more
2018/11/07

ANDRITZ to supply new walking hearth furnace to Deutsche Edelstahlwerke, Germany

The new plant comprises two MAERZ® walking hearth furnaces with automatic loading and unloading device, a MAERZ® car bottom furnace for pre-heating sensitive material grades, and an entry and exit roller conveyor. Read more

2018/10/12

ANDRITZ to supply two furnaces to HBIS Group, Laoting, China

These two furnaces are designed with particular focus on production level and – by using ANDRITZ Differential Rapid Jet cooling (DRJC) – on high cooling rates with the uniform strip temperature required to achieve the specific mechanical properties of AHSS. Read more

2018/10/02

ANDRITZ to supply new hot-dip galvanizing line to thyssenkrupp Steel Europe, Germany

The new line with an annual capacity of 530,000 tons is designed to produce high-strength steel grades, mainly for the automotive industry. Start-up is scheduled for the end of 2020. Read more
ANDRITZ METALS – SCHULER

Entire process chain from hot rolled strip to finished parts

ANDRITZ METALS core competences
Processing lines steel and aluminum strips, industrial furnace systems, and welding systems

Schuler core competences
Press shop equipment
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